

Theory of Operations

for SaberNet DCS 2.0

Title: SaberNet DCS Theory of Operations
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Description: Theory of operations for SaberNet DCS.

Contents

Clock In

When employees report in for work, the first thing they will need to do is clock in. They can do this from any data collection terminal. Ideally it will be the one nearest the entrance. Before they are clocked in, their name will show up in gray on the employee list or not at all, depending on how you have the configuration file set up.

Bar Code Mode

To clock in, all the employee needs to do is use a bar code scanner and scan the "Clock In / Select Yourself" bar code on their employee badge. The system will immediately clock the employee in and return to the employee list for the next transaction. The employee name is displayed in red and is marked as *****IDLE*****. This one-scan clock in allows many employees to quickly clock in without wasting time at the terminal.

Mouse Input Mode

Using the mouse to clock in, the employee simply needs to double-click their name on the employee list. The employee name is displayed in red and is marked as *****IDLE*****.

Beginning a Job

Now the employee is ready to begin working on a job. First they need to let the terminal know who they are.

Bar Code Mode

They will first need to scan the "Clock in / Select Yourself" bar code (the same one they used to clock in). DCS knows that since the employee is already clocked in, it should bring up the selected employee screen and not clock them in again.

Mouse Input Mode

The employee simply needs to double-click their name on the employee screen.

Notice the 'Current Activities' section is empty. As we click on to jobs, you will notice this section fill with details about the employees current activities.

Now we are ready to select the job.

Bar Code Mode

If you have your jobs printed out (often called a Traveler or Operation Note) and have the bar codes directly on the printout, all the employee needs to do now is scan the 'Begin' job bar code to begin that activity.

Mouse Input Mode

Click on the 'Start Production Activity' button. Now you will be presented with a list of all the jobs currently open sorted by priority. To begin one of these jobs, you can double-click on the job or single-click and then press the OK button.

Notice that DCS automatically went back to the employee list and switched the employee from activity 'Idle' to the job that was scanned. Also notice the color coding system for the employee list: IDLE = Red, Production Jobs = Black, Setup Jobs = Green, and Indirect Activities = Blue. This helps you to easily identify 'who' is doing 'what' at any given time.

Ending an Activity

Some time has passed and now the employee wishes to end their current job and begin another. You must first select the employee...

Notice that now there is now an entry under 'Current Activities' for the job we have clocked onto.

Bar Code Mode

Scan the "Clock in / Select Yourself" bar code to identify yourself. With printed jobs, the employee now needs to scan the 'End' bar code. You can configure the behavior of the 'End Activity' bar codes to either automatically clock the employee off a job and return them to the employee list as IDLE or put them into an End Activity screen as seen below. This screen allows the employee to enter piece counts, attach notes to the job, and mark the job completed.

Mouse Input Mode

Double-click the name on the employee screen to select. Press the 'End Activity' button. The next screen allows the employee to enter piece counts, attach notes to the job, and mark the job completed.

Automatic Job Switching

If you do not intend on entering piece counts, entering notes, or marking a job completed, then going to the 'End Activity' screen is an unnecessary step. For that reason,

DCS includes automatic job switching. Using this feature, an employee that is currently clocked onto one job can clock onto another job in the same manner and DCS automatically handles ending the first job and beginning the second. First select the employee...

Bar Code Mode

Scan the <Clock in / Select Yourself> bar code to identify yourself. Scan the job printout for the new job you wish to begin.

Mouse Input Mode

Double-click the name on the employee screen to select. Click the >Start Production> button. Select the next job from the work queue and click <OK>.

DCS ends the previous job, begins the new job, and returns to the employee list.

Job Ganging

SaberNet DCS supports a feature called Job Ganging, which means to be clocked onto multiple jobs at the same time. As always, you must first select yourself...

Bar Code Mode

Scan the <Clock in / Select Yourself> bar code to identify yourself. With the mouse, click the Start Job Ganging button. Start scanning all of the job printout 'Begin' bar codes that you wish to gang and you will see the jobs move from the 'Available Activities' section down to the 'Current Activities' section. With the mouse, click the <OK> button and you will be returned to the employee list.

Mouse Input Mode

Double-click the name on the employee screen to select. Click the Start Job Ganging button. Using the mouse, select the jobs to gang by either double-clicking on them or single-clicking them and then pressing the 'Up' and 'Down' buttons. Click the <OK> button and you will be returned to the employee list.

You will now notice there are two entries for the employee - one for each job. This may seem a bit unusual at first, but there is a good reason why it is set up that way. If you are a supervisor at a site with hundreds of DCS users, you may from time to time want to see everybody who is working on a certain job. From the terminal, you can easily get this information by clicking on the 'Activity' column header and the employee list will be grouped by activity. When somebody is ganged on multiple jobs, they will need to show up in multiple groups when sorted by activity.

Set-up Jobs

SaberNet DCS supports setups on production jobs. This is likely going to be most useful in manufacturing implementations, but it could conceivably be used in the service industry also (perhaps measuring the non-billable sales footwork to get a production job). Setups should work identical to production jobs in every way except for ganging (you cannot gang setup jobs currently). First select the employee...

Bar Code Mode

Scan the <Clock in / Select Yourself> bar code to identify yourself. Now scan a setup bar code. You will return to the employee list.

Mouse Input Mode

Double-click the name on the employee screen to select. Simply click <Start Setup Activity>, select the job you wish to setup from the list, and then click the <OK> button. You can also double-click the job from the set-up list.

After returning to the employee list you will now see the job show up color coded green for setup.

Indirect Activities

Indirect activities are statically defined, generic activities that an employee can clock onto. Often, these activities will be used to capture labor overhead. First, select the employee...

Bar Code Mode

Scan the <Clock in / Select Yourself> bar code to identify yourself. Scan the indirect activity you wish to begin. Since these will not change as often as production jobs, you may decide to have a sheet printed up with all of the available indirect activities.

Mouse Input Mode

Double-click the name on the employee screen to select. Click on the <Start Indirect Activity> button, pick an activity from the resulting list and click <OK> You can also double-click the activity from the list.

To clock off of an indirect activity you can simply clock onto another indirect activity, clock onto a production job, clock onto a set-up job, or click the <End Activity> button to put you back to *****IDLE*****.

Lunch and Break Handling

Lunch and break handling in DCS is another area that has been highly optimized for maximum throughput. Both functions work in a toggle-on / toggle-off manner. That is to say, if you are not on lunch and you scan the lunch bar code, it will put you on lunch. If you are currently on lunch and you scan the lunch bar code, it will take you off lunch. In addition, when you come back from a break or lunch, DCS will automatically resume the activities you were on before you went to lunch.

Bar Code Mode

Scan the <Lunch in / Lunch out> bar code to identify yourself and clock onto lunch.

Mouse Input Mode

Double-click the name on the employee screen to select. Click the <Lunch In/Out> button.

...and after the employee returns from lunch...

Bar Code Mode

Scan the <Lunch in / Lunch out> bar code to identify yourself and clock off lunch.

Mouse Input Mode

Double-click the name on the employee screen to select. Click the <Resume> button.

The employee displays in BLUE and says, "LUNCH - On Lunch".

Breaks follow the exact same procedures as lunch. Employees will use their <Break in / Break out> bar code or click the <Break In/Out> button. The employee displays in BLUE as "BREAK - On Break".

Clock Out

The last operation from the employee side is clocking out.

Bar Code Mode

Scan the 'Clock Out' bar code and DCS will automatically end all jobs and clock the employee out.

Mouse Input Mode

Double-click the name on the employee screen to select. Click the <Clock Out> button.